UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,722	01/28/2002	Yong Lu	CISCP251/4378	7898

22434 7590 05/26/2006		EXAMINER
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2155	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/058,722	LU ET AL.
	Examiner	Art Unit	
	Thuong (Tina) T. Nguyen	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>1/28/02</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-34</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-34</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>28 January 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

    1.☐ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>1/12/04</u>.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is in response to application 10/058,722 filed 1/28/02. Claims 1-34

are pending and represent method, computer readable medium, system for apparatus

and methods for restoring traffic during failover in a cable head end.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

3.   Claims 1, 32-34 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. It's unclear to the examiner why would the backup

cable modem is to be restored in which the transmission of message between the one

or more cable modems?

4.   Claims 1, 32-34 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. It's unclear to the examiner what is the prioritizing

subscriber information of the transmission of message? How does the applicant

prioritize the transmission of message? Base on what factor?

5.   Claims 1, 32-34 recites the limitation "the backup cable modems" in a backup

cable modems. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

6.   Claim 4 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It's unclear to the examiner what does it means by identifies those modems that have ranged successfully.

7.   Claims 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It's unclear to the examiner base on what order or factor the applicant prioritizing the subscriber information.

8.   Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It's unclear what is UGS or UGS-AD stands for.

9.   Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It's unclear to the examiner what does it means by prioritizing the subscriber information not having a secondary identifier, does it means it would be in different order or level?

Claim Rejections - 35 USC § 102

10.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11.   Claims 1-6, 22-24, 26-27, 30-31, 32-34 are rejected under 35 U.S.C. 102(e) as

being anticipated by Burroughs Patent No. 2002/0144284 A1. Burroughs teaches the

invention as claimed including reliability enhancement for cable modem service (see

abstract).

12.   As to claim 1, Burroughs teaches a method comprising:

receiving subscriber information associated with one or more cable modems from

an active cable modem termination system, the subscriber information including one or

more subscriber identifiers (page 5, paragraph 48; Burroughs discloses that the method

of storing the various information to support the operation of cable modem);

prioritizing the subscriber information, the prioritized subscriber information

indicating an order in which the transmission of messages between the one or more

cable modems and the backup cable modem is to be restored (page 3, paragraph 31;

page 4, paragraph 34; Burroughs discloses that the method of specified alternate

downstream and upstream channel in the event of a failure of the primary modem); and

polling the cable modems in the order indicated by the prioritized subscriber information (page 4, paragraph 37; Burroughs discloses that the method of analyze the registration requested message of the subscriber information).

13.   As to claim 2, Burroughs teaches the method as recited in claim 1, wherein prioritizing and polling are performed in response to a failover trigger from the active cable modem termination system (page 3, paragraph 28; Burroughs discloses that the method of cable modem is assigned at least one alternative downstream channel become invalid).

14.   As to claim 3, Burroughs teaches the method as recited in claim 1, further comprising:

determining that the active cable modem termination system has failed (page 4, paragraph 42; Burroughs discloses that the method of determined failure of the cable modem's primary channel);

wherein prioritizing and polling are performed after determining that the active cable modem termination system has failed (page 4, paragraph 41; Burroughs discloses that the method of determined the power levels, cable modem to detect the invalid of the channel).

15.   As to claim 4, Burroughs teaches the method as recited in claim 1, wherein the subscriber information identifies those modems that have ranged successfully (page 4, paragraph 43; Burroughs discloses that the method of identified the particular frequency to which receiver and transmitter tune).

16.   As to claim 5, Burroughs teaches the method as recited in claim 1, wherein

receiving the subscriber information occurs after a specified period of time or after a call

is received by the active cable modem termination system from one or more of the

cable modems (page 4, paragraph 36; Burroughs discloses that the method of

determined if the ranging process to be successful when no response is received after

some period).

17.   As to claim 6, Burroughs teaches the method as recited in claim 1, further

comprising:

        storing the subscriber information after receiving the subscriber information (page

1, paragraph 9; Burroughs discloses that the method of storing the external source

information);

        wherein prioritizing the subscriber information comprises prioritizing the stored

subscriber information (page 1, paragraph 9; Burroughs discloses that the method of

storing the subscriber information).

18.   As to claim 22, Burroughs teaches the method as recited in claim 1, wherein

prioritizing the subscriber information comprises: storing the subscriber information and

a time of receipt of the subscriber information by the backup cable modem termination

system such that the subscriber information is associated with the time of receipt (page

5, paragraph 48; Burroughs discloses that the method of storing the various information

to support the operation of cable modem).

19.   As to claim 23, Burroughs teaches the method as recited in claim 22, wherein the

stored subscriber information is stored in order of the time of receipt (page 5, paragraph

46; Burroughs discloses that the method of storing the various parameters that are required for communication with a cable modem).

20.   As to claim 24, Burroughs teaches the method as recited in claim 1, further comprising: storing the subscriber information and a time of receipt of the subscriber information by the backup cable modem termination system such that the subscriber information is associated with the time of receipt (page 5, paragraph 48; Burroughs discloses that the method of storing the various information to support the operation of cable modem).

21.   As to claim 26, Burroughs teaches the method as recited in claim 1, further comprising: after receiving the subscriber information, sending an acknowledgement of the subscriber information to the active cable modem termination system (page 5, paragraph 49; Burroughs discloses that the method of initialization the information regarding cable modems that are served by the other such as sending the acknowledgment to the CMTS).

22.   As to claim 27, Burroughs teaches the method as recited in claim 1, further comprising: repeatedly receiving subscriber information associated with one or more cable modems from an active cable modem termination system prior to prioritizing the subscriber information (page 4, paragraph 41; Burroughs discloses that the method of detected the invalid of the downstream primary channel and maintain the separate range setting).

23.   As to claim 30, Burroughs teaches the method as recited in claim 1, further comprising:

receiving an indication that an active cable modem termination system has failed (page 3, paragraph 32; Burroughs discloses that the method of determined if the primary downstream channel is invalid);

determining an identity of the failed active cable modem termination system (page 3, paragraph 32; Burroughs discloses that the method of determined if the primary channel if invalid by detecting the loss of sync message, within time-out period and after a specific number of attempted); and

wherein receiving subscriber information associated with one or more cable modems from the active cable modem termination system comprises obtaining the subscriber information associated with the failed active cable modem termination system (page 3, paragraph 29 & 32; Burroughs discloses that the method of transmit to the backup channel or modem once detecting the failure of the primary channel).

24.   As to claim 31, Burroughs teaches the method as recited in claim 1, further comprising:

receiving an indication that a call initiated by one of the cable modems has been terminated (page 1, paragraph 4; Burroughs discloses that the method of detecting the failure of the CMTS); and

removing subscriber information associated with the one of the cable modems from memory associated with a previously failed active cable modem termination system (page 1, paragraph 7; Burroughs discloses that the method of initializing the parameter, configuration once detect the invalid of the primary CMTS).

25.   As to claim 32, Burroughs teaches a computer-readable medium comprising:

instructions for receiving subscriber information associated with one or more

cable modems from an active cable modem termination system, the subscriber

information including one or more subscriber identifiers (page 5, paragraph 48;

Burroughs discloses that the computer-readable medium of storing the various

information to support the operation of cable modem);

instructions for prioritizing the subscriber information, the prioritized subscriber

information indicating an order in which the transmission of messages between the one

or more cable modems and the backup cable modem is to be restored (page 3,

paragraph 31; page 4, paragraph 34; Burroughs discloses that the computer-readable

medium of specified alternate downstream and upstream channel in the event of a

failure of the primary modem); and

instructions for polling the cable modems in the order indicated by the prioritized

subscriber information (page 4, paragraph 37; Burroughs discloses that the computer-

readable medium of analyze the registration requested message of the subscriber

information).

26.   As to claim 33, Burroughs teaches a system comprising:

means for receiving subscriber information associated with one or more cable

modems from an active cable modem termination system, the subscriber information

including one or more subscriber identifiers (page 5, paragraph 48; Burroughs discloses

that the system of storing the various information to support the operation of cable

modem);

means for prioritizing the subscriber information, the prioritized subscriber

information indicating an order in which the transmission of messages between the one

or more cable modems and the backup cable modem is to be restored (page 3,

paragraph 31; page 4, paragraph 34; Burroughs discloses that the system of specified

alternate downstream and upstream channel in the event of a failure of the primary

modem); and

means for polling the cable modems in the order indicated by the prioritized

subscriber information (page 4, paragraph 37; Burroughs discloses that the system of

analyze the registration requested message of the subscriber information).

27.   As to claim 34, Burroughs teaches a system comprising:

a processor (figure 3 & 4); and

a memory (figure 3 & 4),

at least one of the processor and the memory being adapted for:

receiving subscriber information associated with one or more cable modems from

an active cable modem termination system, the subscriber information including one or

more subscriber identifiers (page 5, paragraph 48; Burroughs discloses that the system

of storing the various information to support the operation of cable modem);

prioritizing the subscriber information, the prioritized subscriber information

indicating an order in which the transmission of messages between the one or more

cable modems and the backup cable modem is to be restored (page 3, paragraph 31;

page 4, paragraph 34; Burroughs discloses that the system of specified alternate

downstream and upstream channel in the event of a failure of the primary modem); and

polling the cable modems in the order indicated by the prioritized subscriber

information (page 4, paragraph 37; Burroughs discloses that the system of analyze the

registration requested message of the subscriber information).

Claim Rejections - 35 USC § 103

28.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

29.   Claims 7-21, 25, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Burroughs, Patent No. reliability enhancement for cable modem service in view of

Gummalla, Patent No. 6,999,414 B2.

Burroughs teaches the invention substantially as claimed including reliability

enhancement for cable modem service (see abstract).

30.   As to claim 7, Burroughs teaches the method as recited in claim 1. But

Burroughs fails to teach the claim limitation wherein the subscriber information

associated with each of the cable modems comprises a primary subscriber identifier

that identifies the associated cable modem.

However, Gummalla teaches system and method for combining requests for data

bandwidth by a data provider for transmission of data over an asynchronous

communication medium (see abstract).

Gummalla teaches the limitation wherein the subscriber information associated with each of the cable modems comprises a primary subscriber identifier that identifies the associated cable modem (col 4, lines 38-50).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Burroughs in view of Gummalla so that the cable modem receives data from a user to be transferred via a cable network. One would be motivated to do so to ensure the importance of different priority identifiers to different types of data.

31.   As to claim 8, Burroughs teaches the method as recited in claim 7, wherein the subscriber information further comprises a MAC address associated with the cable modem (figure 3).

32.   As to claim 9, Burroughs teaches the method as recited in claim 7. But Burroughs fails to teach the claim limitation wherein at least a portion of the subscriber information further comprises a secondary subscriber identifier.

However, Gummalla teaches the limitation wherein at least a portion of the subscriber information further comprises a secondary subscriber identifier (figure 9).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Burroughs in view of Gummalla so that increasing the efficiency of providing requested bandwidth to a data. One would be motivated to do so to distribution data from the CMTS to the cable modem.

33.   As to claim 10, Burroughs teaches the method as recited in claim 9. But Burroughs fails to teach the claim limitation wherein the secondary subscriber identifier

indicates that the messages to be transmitted between the backup cable modem termination system and the associated cable modem are to be transmitted in real-time.

However, Gummalla teaches the limitation wherein the secondary subscriber identifier indicates that the messages to be transmitted between the backup cable modem termination system and the associated cable modem are to be transmitted in real-time (col 6, lines 33-43).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Burroughs in view of Gummalla so that sending different bandwidth requests to CMTS. One would be motivated to do so to differentiate different priority identifiers values for data that has arrived at CMTS at different times.

34.   As to claim 11, Burroughs teaches the method as recited in claim 9. But Burroughs fails to teach the claim limitation wherein the secondary subscriber identifier indicates whether the messages to be transmitted between the backup cable modem termination system and the associated cable modem include voice data or video data.

However, Gummalla teaches the limitation wherein the secondary subscriber identifier indicates whether the messages to be transmitted between the backup cable modem termination system and the associated cable modem include voice data or video data (col 5, lines 6-28).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Burroughs in view of Gummalla so that grant the requested bandwidth to cable modem accordingly for the voice data and video data. One would be motivated to do so to ensure the bandwidth of the requested data.

35.   As to claim 12, Burroughs teaches the method as recited in claim 9, wherein the

subscriber information further comprises quality of service requirements (page 4,

paragraph 39; Burroughs discloses that the method of set up services flows to specified

quality of service levels).

36.   As to claim 13, Burroughs teaches the method as recited in claim 9. But

Burroughs fails to teach the claim limitation wherein at least a portion of the subscriber

information further comprises a scheduling type.

However, Gummalla teaches the limitation wherein at least a portion of the

subscriber information further comprises a scheduling type (col 8, lines 21-24).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify Burroughs in view of Gummalla so that the system schedule the

bandwidth transmit based on the quality of service parameters. One would be

motivated to do so to prioritize the requested accordingly.

37.   As to claim 14, Burroughs teaches the method as recited in claim 13. But

Burroughs fails to teach the claim limitation wherein the scheduling type indicates a type

of real-time traffic to be transmitted.

However, Gummalla teaches the limitation wherein the scheduling type indicates

a type of real-time traffic to be transmitted (col 7, lines 58-68).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify Burroughs in view of Gummalla so that the traffic could be faster and

more accurate. One would be motivated to do so to reduce the overhead of bandwidth

grants via downstream communication.

38.   As to claim 15, Burroughs teaches the method as recited in claim 13, wherein the secondary subscriber identifier indicates that the messages to be transmitted between the backup cable modem termination system and the associated cable modem are to be transmitted in real-time (page 1, paragraph 7; Burroughs discloses that the method of identified the alternate cable modem).

39.   As to claim 16, Burroughs teaches the method as recited in claim 13. But Burroughs fails to teach the claim limitation wherein the scheduling type indicates whether the messages to be transmitted between the backup cable modem termination system and the associated cable modem include voice data or video data.

However, Gummalla teaches the limitation wherein the scheduling type indicates whether the messages to be transmitted between the backup cable modem termination system and the associated cable modem include voice data or video data (col 4, lines 51-64).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Burroughs in view of Gummalla so that the bandwidth prioritizes accordingly. One would be motivated to do so to ensures there would be enough bandwidth for each type of data.

40.   As to claim 17, Burroughs teaches the method as recited in claim 13. But Burroughs fails to teach the claim limitation wherein the scheduling type is UGS or UGS-AD.

However, Gummalla teaches the limitation wherein the scheduling type is UGS or UGS-AD (figure 7).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Burroughs in view of Gummalla so that system would provide more variety choices. One would be motivated to do so to improve the performance of the system.

41.   As to claim 18, Burroughs teaches the method as recited in claim 13. But Burroughs fails to teach the claim limitation wherein prioritizing the subscriber information comprises searching the subscriber information for a secondary subscriber identifier; and prioritizing the subscriber information having a secondary subscriber identifier such that the subscriber information has a higher priority than the subscriber information not having a secondary subscriber identifier.

However, Gummalla teaches the limitation wherein prioritizing the subscriber information comprises searching the subscriber information for a secondary subscriber identifier (col 5, lines 49-63); and prioritizing the subscriber information having a secondary subscriber identifier such that the subscriber information has a higher priority than the subscriber information not having a secondary subscriber identifier (col 7, lines 4-10).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Burroughs in view of Gummalla so that the bandwidth requested are schedule to be service based on priority identifier. One would be motivated to do so to schedule the service based on the various quality of service parameter.

42.   As to claim 19, Burroughs teaches the method as recited in claim 18. But Burroughs fails to teach the claim limitation wherein prioritizing the subscriber

information having a secondary subscriber identifier further comprises: prioritizing the

subscriber information having a secondary subscriber identifier according to the

scheduling type.

However, Gummalla teaches the limitation wherein prioritizing the subscriber

information having a secondary subscriber identifier further comprises: prioritizing the

subscriber information having a secondary subscriber identifier according to the

scheduling type (col 8, lines 1-15).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify Burroughs in view of Gummalla so that separate the schedule of the

bandwidth requested and data bust. One would be motivated to do so to utilize

schedule to combine bandwidth requests from the same cable modem.

43.   As to claim 20, Burroughs teaches the method as recited in claim 19, wherein

prioritizing the subscriber information having a secondary identifier further comprises:

prioritizing the subscriber information having a secondary identifier according to time of

receipt of the subscriber information from the active cable modem termination system

(page 3, paragraph 22; Burroughs discloses that the method of prioritize the cable

modem accordingly).

44.   As to claim 21, Burroughs teaches the method as recited in claim 18, wherein

prioritizing the subscriber information not having a secondary identifier comprises:

prioritizing the subscriber information not having a secondary identifier according to time

of receipt of the subscriber information from the active cable modem termination system

(page 3, paragraph 33; Burroughs discloses that the method of detecting the valid

channel based in the result of transmitting or receiving data).

45.   As to claim 25, Burroughs teaches the method as recited in claim 24. But

Burroughs fails to teach the claim limitation comprising prioritizing the subscriber

information according to the time of receipt.

However, Gummalla teaches the limitation wherein prioritizing the subscriber

information according to the time of receipt (col 8, lines 49-58).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify Burroughs in view of Gummalla so that CMTS schedule each data

bandwidth accordingly. One would be motivated to do so to differentiate the important

of the timing and type of data.

46.   As to claim 28, Burroughs teaches the method as recited in claim 27, wherein

receiving subscriber information comprises receiving subscriber information associated

with one or more cable modems from a first active cable modem termination system

and receiving subscriber information associated with one or more cable modems from a

second active cable modem termination system (page 3, paragraph 31; Burroughs

discloses that the method of establishing cable modem service for a cable modem on

specified alternate downstream and upstream channels in the event failure of the

primary CMTS).

But Burroughs fails to teach the claim limitation wherein prioritizing the subscriber

information comprises prioritizing the subscriber information associated with the first

active cable modem termination system is performed separately from prioritizing the

subscriber information associated with the second active cable modem termination system.

However, Gummalla teaches the limitation wherein prioritizing the subscriber information comprises prioritizing the subscriber information associated with the first active cable modem termination system is performed separately from prioritizing the subscriber information associated with the second active cable modem termination system (col 2, lines 33-63).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Burroughs in view of Gummalla so that providing the requested bandwidth and prioritize accordingly. One would be motivated to do so to structure data in order in which the bandwidth request were synchronize with the prioritize and scheduling system.

47.   As to claim 29, Burroughs teaches the method as recited in claim 28, further comprising: storing the prioritized subscriber information associated with the first active cable modem termination system separately from the prioritized subscriber information associated with the second active cable modem termination system (page 4, paragraph 38; Burroughs discloses that the method of transferring the necessary parameters of the subscriber information to the alternate CMTS).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuong (Tina) Nguyen whose telephone number is 571-272-3864, and the fax number is 571-273-3864. The examiner can normally be reached on 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thuong (Tina) Nguyen
Patent Examiner/Art Unit 2155

SALEH NAJJAR
SUPERVISORY PATENT EXAMINER